

Application No. 10/790,413
Response dated November 29, 2005
Reply to Office Action mailed November 15, 2005

AMENDMENTS TO THE CLAIMS

1. (Withdrawn) An archwire assembly for orthodontic braces, comprising:
 - an archwire;
 - a first crimpable sleeve adapted to slidably move along said archwire; and
 - first and second removable stops, said first crimpable sleeve positioned between said first and second removable stops.
2. (Withdrawn) The archwire assembly of claim 1 wherein said first and second removable stops are selected from the group consisting of elastic O-rings, slotted collars, spring-loaded stops, resilient bands, discrete amounts of polymeric material, discrete amounts of organic material, discrete amounts of wax, and combinations thereof.
3. (Withdrawn) The archwire assembly of claim 1 further comprising:
 - a second crimpable sleeve positioned between said first and second removable stops.
4. (Withdrawn) The archwire assembly of claim 3 further comprising:
 - a third removable stop positioned between said first and second crimpable sleeves.

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5. (Withdrawn) The archwire assembly of claim 1 wherein said archwire has first and second free ends, each of said first and second removable stops adjacent a corresponding one of said first and second free ends.

6. (Withdrawn) The archwire assembly of claim 1 wherein said first and second removable stops are movable along said archwire.

7. (Withdrawn) The archwire assembly of claim 6 wherein said first and second removable stops are movable along said archwire by a sliding force greater than the weight of said crimpable sleeve.

8. (Withdrawn) The archwire assembly of claim 7 wherein the sliding force is approximately equal to one half pound.

9. (Original) An archwire assembly for orthodontic braces comprising:
an archwire;
a crimpable sleeve adapted to slidably move along said archwire; and
a friction-creating substance applied to at least one of said crimpable sleeve and said archwire, said friction-creating substance adapted to limit movement of said crimpable sleeve along said archwire.

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10. (Original) The archwire assembly of claim 9 further comprising first and second removable stops, said crimpable sleeve positioned between said first and second removable stops.

11. (Original) The archwire assembly of claim 10 wherein said friction-creating substance is selected from the group consisting of waxes, sugar compounds, starches, elastomeric materials, organic materials, and polymeric materials.

12. (Original) The archwire assembly of claim 10 wherein said archwire has first and second free ends, said first and second removable stops adjacent said first and second free ends.

13. (Original) The archwire assembly of claim 9 wherein said crimpable sleeve is movable along said archwire.

14. (Original) The archwire assembly of claim 13 wherein said first and second removable stops are movable along said archwire by a sliding force greater than the weight of said crimpable sleeve.

15. (Original) The archwire assembly of claim 14 wherein the sliding force is approximately equal to one half pound.

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16. (Original) The archwire assembly of claim 9 wherein said friction-creating substance at least partially fills said crimpable sleeve.
17. (Original) The archwire assembly of claim 9 wherein said friction-creating substance at least partially coats said archwire.
18. (Original) The archwire assembly of claim 9 wherein said friction-creating substance is removable.
19. (Original) The archwire assembly of claim 18 wherein said removable friction-creating substance is water soluble.
20. (Original) The archwire assembly of claim 19 wherein said friction-creating substance is selected from the group consisting of waxes, sugar compounds, starches, elastomeric materials, organic materials, and polymeric materials.
21. (Withdrawn) An archwire assembly for orthodontic braces comprising:
an archwire; and
a crimpable sleeve partially crimped to allow for limited sliding movement of said crimpable sleeve along said archwire, wherein said crimpable sleeve is further capable of being finally crimped to prevent sliding movement along said archwire.

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22. (Withdrawn) The archwire assembly of claim 21 further comprising first and second removable stops, said crimpable sleeve positioned between said first and second removable stops.

23. (Withdrawn) The archwire assembly of claim 22 wherein said first and second removable stops are selected from the group consisting of elastic O-rings, slotted collars, spring-loaded stops, resilient bands, discrete amounts of polymeric material, discrete amounts of organic material, discrete amounts of wax, and combinations thereof.

24. (Withdrawn) The archwire assembly of claim 22 wherein said archwire has first and second free ends, said first and second removable stops adjacent said first and second free ends.

25. (Withdrawn) The archwire assembly of claim 21 further comprising a friction-creating substance applied to one of said crimpable sleeve and said archwire, said friction-creating substance adapted to limit movement of said crimpable sleeve along said archwire.

26. (Withdrawn) The archwire assembly of claim 25 wherein said friction-creating substance is selected from the group consisting of waxes, sugar compounds, organic materials, starches, elastomeric materials, and polymeric materials.

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27. (Withdrawn) The archwire assembly of claim 21 wherein said crimpable sleeve is movable along said archwire.

28. (Withdrawn) The archwire assembly of claim 27 wherein said first and second removable stops are movable along said archwire by a sliding force greater than the weight of said crimpable sleeve.

29. (Withdrawn) The archwire assembly of claim 28 wherein the sliding force is approximately equal to one half pound.

30. (Original) An archwire assembly for orthodontic braces comprising:
an archwire;
a crimpable sleeve adapted to slidably move along said archwire; and
a stop applied to at least one of said archwire and said crimpable sleeve,
said stop adapted to limit movement of said crimpable sleeve along said archwire.

31. (Original) The archwire assembly of claim 30 wherein said stop is removable.

32. (Original) The archwire assembly of claim 30 wherein at least one of said stop and said crimpable sleeve is movable along said archwire.

33. (Currently Amended) The archwire assembly of claim 30 wherein said ~~wherein said~~ stop is selected from the group consisting of elastic O-rings, slotted collars, spring-

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loaded stops, resilient bands, friction-creating substances, discrete amounts of polymeric material, discrete amounts of organic material, discrete amounts of wax, and combinations thereof.

34. (Original) A method of making an archwire assembly comprising:

applying a crimpable sleeve to an archwire; and
limiting movement of the crimpable sleeve along the archwire.

35. (Original) The method of claim 34 further comprising:

packaging the archwire assembly for delivery to a doctor's office.

36. (Withdrawn) The method of claim 34 wherein limiting the movement of the crimpable sleeve along the archwire comprises applying first and second removable stops to the archwire.

37. (Original) The method of claim 34 wherein limiting the movement of the crimpable sleeve along the archwire comprises applying a friction-creating substance to at least one of the crimpable sleeve and the archwire.

38. (Withdrawn) The method of claim 34 wherein limiting the movement of the crimpable sleeve along the archwire comprises partially crimping the crimpable sleeve.

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39. (Original) A method of using an archwire assembly in combination with a plurality of orthodontic brackets applied to a plurality of teeth, the archwire assembly comprising an archwire, a crimpable sleeve mounted on the archwire, and a stop adapted to limit movement of the crimpable sleeve along the archwire, comprising:

applying the plurality of orthodontic brackets to the plurality of teeth;
securing the archwire assembly to the plurality of orthodontic brackets;

and

removing the stop from the archwire.

40. (Original) The method of claim 39 further comprising:

crimping the crimpable sleeve to secure the crimpable sleeve to the archwire at a fixed position.

41. (Withdrawn) The method of claim 39 further comprising:

repositioning at least one of the crimpable sleeve and the stop along the archwire so as to position the crimpable sleeve between two adjacent brackets.

42. (Withdrawn) The method of claim 39 wherein removing the stop comprises cutting the stop from the archwire.

43. (Withdrawn) The method of claim 39 wherein removing the stop comprises sliding the archwire through a radial slot provided in the stop.

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44. (Withdrawn) The method of claim 39 wherein removing the stop comprises sliding the stop off free ends of the archwire.

45. (Original) The method of claim 39 wherein removing the stop comprises dissolving the stop.

46. (Original) The method of claim 45 wherein dissolving the stop comprises rinsing the archwire with water.

47. (Original) The method of claim 45 wherein dissolving the stop comprises allowing saliva to dissolve the stop.

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